

WE CLAIM:

1. An antimicrobial medical article prepared by treating a polymeric medical article, for an effective period of time, with a solution consisting essentially of one or more solvents and a mixture of chlorhexidine free base and a water-soluble chlorhexidine salt, wherein the weight/weight ratio of chlorhexidine free base and the water-soluble chlorhexidine salt in the solution is between 1:1 to 1:5.

2. The antimicrobial medical article of claim 1, wherein the ratio is 1:1.

3. The antimicrobial medical article of claim 1, wherein the solvent is selected from the group consisting of water, alcohol, tetrahydrofuran, dimethylsulfoxide, dimethylformamide, N-methyl-2-pyrrolidone, and mixtures thereof.

4. The antimicrobial medical article of claim 3, wherein the solvent is a mixture of between 10 and 30 percent (volume/volume) tetrahydrofuran and 70 and 90 percent (volume/volume) ethanol.

5. The antimicrobial medical article of claim 7, wherein the solvent is a mixture of 20 percent (volume/volume) tetrahydrofuran and 80 percent (volume/volume) ethanol.

6. The antimicrobial medical article of claim 3, wherein the solvent is a mixture of between 75 and 95 percent (volume/volume) tetrahydrofuran and 5 and 25 percent (volume/volume) methanol.

7. The antimicrobial medical article of claim 6, wherein the solvent is a mixture of about 85 percent (volume/volume) tetrahydrofuran and 15 percent (volume/volume) methanol.

1                   8.     The antimicrobial medical article of claim 1, wherein the article is  
2     a hydrophilic polymeric medical article.

1                   9.     The antimicrobial medical article of claim 8, wherein the article is  
2     a catheter.

1                   10.    The catheter of claim 9, wherein the catheter has a lumen which is  
2     treated, for an effective period of time, with the solution consisting essentially of one or  
3     more solvents and the mixture of chlorhexidine free base and water-soluble chlorhexidine  
4     salt.

1                   11.    The medical article of claim 8, wherein the water-soluble  
2     chlorhexidine salt is chlorhexidine diacetate.

1                   12.    The catheter of claim 9, wherein the water-soluble chlorhexidine  
2     salt is chlorhexidine diacetate.

1                   13.    The catheter of claim 10, wherein the water-soluble chlorhexidine  
2     salt is chlorhexidine diacetate.

1                   14.    The antimicrobial medical article of claim 1, wherein the article is  
2     a hydrophobic polymeric medical article.

1                   15.    The antimicrobial medical article of claim 14, wherein the article is  
2     expanded polytetrafluoroethylene.

3                   16.    The antimicrobial medical article of claim 14, wherein the article is  
4     a polytetrafluoroethylene soft tissue patch.

1           / 17. An antimicrobial medical article prepared by treating a polymeric  
2 medical article, for an effective period of time, with a solution consisting essentially of  
3           (1) one or more solvents;  
4           (2) a mixture of chlorhexidine free base and a water-soluble chlorhexidine  
5 salt; and  
6           (3) one or more of (i) an organic acid, at a concentration of between 0.1  
7 and 5 percent; (ii) an anti-inflammatory agent, at a concentration of between 0.1 and 5  
8 percent; or (iii) a hydrogel at a concentration of between 0.5 to 10 percent,  
9 wherein the weight/weight ratio of chlorhexidine free base and the water-  
10 soluble chlorhexidine salt in the solution is between 1:1 to 1:5.

1           18. The antimicrobial medical article of claim 17, wherein the  
2 concentration of organic acid in the solution is between 0.1 and 2 percent.

1           19. The antimicrobial medical article of claim 17, wherein the  
2 concentration of anti-inflammatory agent is between 0.1 and 1 percent.

1           20. The antimicrobial medical article of claim 17, wherein the  
2 concentration of hydrogel in the solution is between 1 and 5 percent.

1           / 21. A method of preparing a medical article comprising the steps of  
2           (i) placing the medical article in a solution consisting essentially of  
3 (a) a solvent selected from the group consisting of water, reagent alcohol,  
4 tetrahydrofuran, dimethylsulfoxide, dimethylformamide, N-methyl-2-pyrrolidone, and  
5 mixtures thereof; and (b) a mixture of chlorhexidine free base and a water-soluble  
6 chlorhexidine salt, wherein the weight/weight ratio of chlorhexidine free base and water-  
7 soluble chlorhexidine salt in the solution is between 1:1 to 1:5;  
8           (ii) soaking the medical article in the solution for an effective  
9 period of time to allow the medical article to swell;  
10           (iii) removing the medical article from the solution; and

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**Abstract**